

EP 24774 (2)

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## PATENT SPECIFICATION



Application Date: May 30, 1924. No. 13,312/24.

238,963

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### PROVISIONAL SPECIFICATION.

#### Improvements in or relating to Electric Fuse Boxes.

We, A. REYROLLE & COMPANY, LIMITED, a company registered under the laws of Great Britain, of Hebburn-on-Tyne, in the County of Durham, and HENRY WILLIAM CLOTHIER, British subject, of The Green, Wallsend-on-Tyne, in the County of Northumberland, do hereby declare the nature of this invention to be as follows:—

10 This invention relates to electric fuse boxes and has particular reference to house service boxes in which current entering from mains at one side of the box is distributed through a number of  
15 fuses to subsidiary circuits on the other side.

A fuse box according to this invention is provided with a switch operated or controlled by the lid of the box so that the  
20 lid cannot be opened to give access to the fuses without cutting off the current from them.

The switch and the operative connections between it and the lid of the fuse  
25 box may be of any convenient form but in one preferred construction there is attached to or combined with the base of the box, the socket member of a plug switch. This is placed on a part of the

box remote from the hinges of the lid. 30 Attached to the lid is the pin or plug member of the switch in such a position that when the lid is closed the pins will enter the socket connections of the fixed member. The in-coming mains are connected 35 to the fixed socket member and a flexible, preferably metal covered, connection is provided between the pins on the member carried by the lid and the fuse supports to which, in the usual type of fuse box the mains are joined directly. 40 A handle of convenient form is provided on the lid, preferably near the point at which the plug member of the switch is attached so that in opening, the  
45 pull comes directly on to the plug member.

Conveniently the plug switch is of standard type so that when the lid is opened and the fuses are consequently  
50 "dead", any plug of the same standard size attached say to a portable lamp can be inserted into the socket and thus provide light to enable the fuses in the box to be inspected or handled. 55

Dated this 30th day of May, 1924.

KILBURN & STRODE,  
Agents for the Applicants.

### COMPLETE SPECIFICATION.

#### Improvements in or relating to Electric Fuse Boxes.

We, A. REYROLLE & COMPANY LIMITED, a company registered under the laws of Great Britain, of Hebburn-on-Tyne, in the County of Durham, and HENRY WILLIAM CLOTHIER, British subject, of The Green, Wallsend-on-Tyne, in the  
60 County of Northumberland, do hereby declare the nature of this invention and in what manner the same is to be  
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performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to electric fuse boxes of the kind in which the current is automatically cut off from the fuses by opening the lid of the box and has particular reference to house service boxes in  
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at one side of the box is distributed through a number of fuses to subsidiary circuits on the other side.

According to this invention there is  
5 combined with the electric house service or like fuse box, a plug and socket switch, one member of which is attached to the base of the box and the other to the lid, the parts being so connected that the  
10 opening of the lid breaks the connection to the fuses but leaves one member of the plug and socket switch alive, so that a plug or socket connection of standard type may be fitted to the member and provide current for a portable lamp to enable  
15 the fuses in the boxes to be inspected or handled.

Preferably the socket member of the plug switch is attached to the base of the box in a position remote from the hinges  
20 of the lid. Attached to the lid is the pin or plug member of the switch in such a position that when the lid is closed the pins will enter the socket connections of the fixed member. The incoming mains are connected to the fixed socket member  
25 and a flexible, preferably metal-covered, connection is provided between the pins on the member carried by the lid and the fuse supports to which in the usual type of fuse box the mains are joined directly.  
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A handle of convenient form is provided on the lid preferably near the point at which the plug member of the switch is attached so that in opening the pull comes directly on to the plug member.  
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In the accompanying drawings,

Figure 1 is an elevation of one construction of house service fuse box according to this invention showing the lid  
40 opened.

Figure 2 is a similar view showing the lid closed, and

Figure 3 is a bottom plan showing in full lines the lid closed as in Figure 2 and in broken lines, the lid partly  
45 opened.

The fuse box A is of the ordinary type having, in the example shown, two pairs  
50 of fuses B and B<sup>1</sup> separated by an insulating barrier C and leading out to circuit conductors D. The box is provided with a hinged lid A<sup>1</sup> and window A<sup>2</sup>.

Attached to the box A or to the base upon which it is supported is the socket member E of a plug and socket switch, the plug or pin member E<sup>1</sup> being fixed to the lid A<sup>1</sup>. The incoming conductors, instead of being joined directly to the blocks or clips B<sup>2</sup> of the fuses, are connected to the sockets of the member E and the blocks or clips B<sup>2</sup> are joined by conductors F passing through a flexible protecting tube G to the plugs or pins of the member E<sup>1</sup>.  
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Fixed to the lid A<sup>1</sup> adjacent to the member E<sup>1</sup> is a handle H so that the pull necessary to open the lid is applied practically directly to the plug member E<sup>1</sup>.

As will be seen, the fuses B and B<sup>1</sup> are only in circuit when the lid is closed. When it is opened they are dead and may be handled freely.  
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As the plug and socket switch E E<sup>1</sup> is of standard type, it is possible to apply to the socket E a plug connected to a portable lamp so that light may be obtained when inspecting or replacing the fuses.  
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The present invention is not to be confused with what are sometimes known as "switch fuses" in which the fuses themselves are mounted on a lid so that when the lid is opened they are withdrawn from clips or sockets fixed in the box.  
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Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—  
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1. The combination with an electric house service or like fuse box, of a plug and socket switch, one member of which is attached to the base of the box and the other to the lid, the parts being so connected that the opening of the lid breaks the connection to the fuses but leaves one member of the switch alive substantially as and for the purpose described.  
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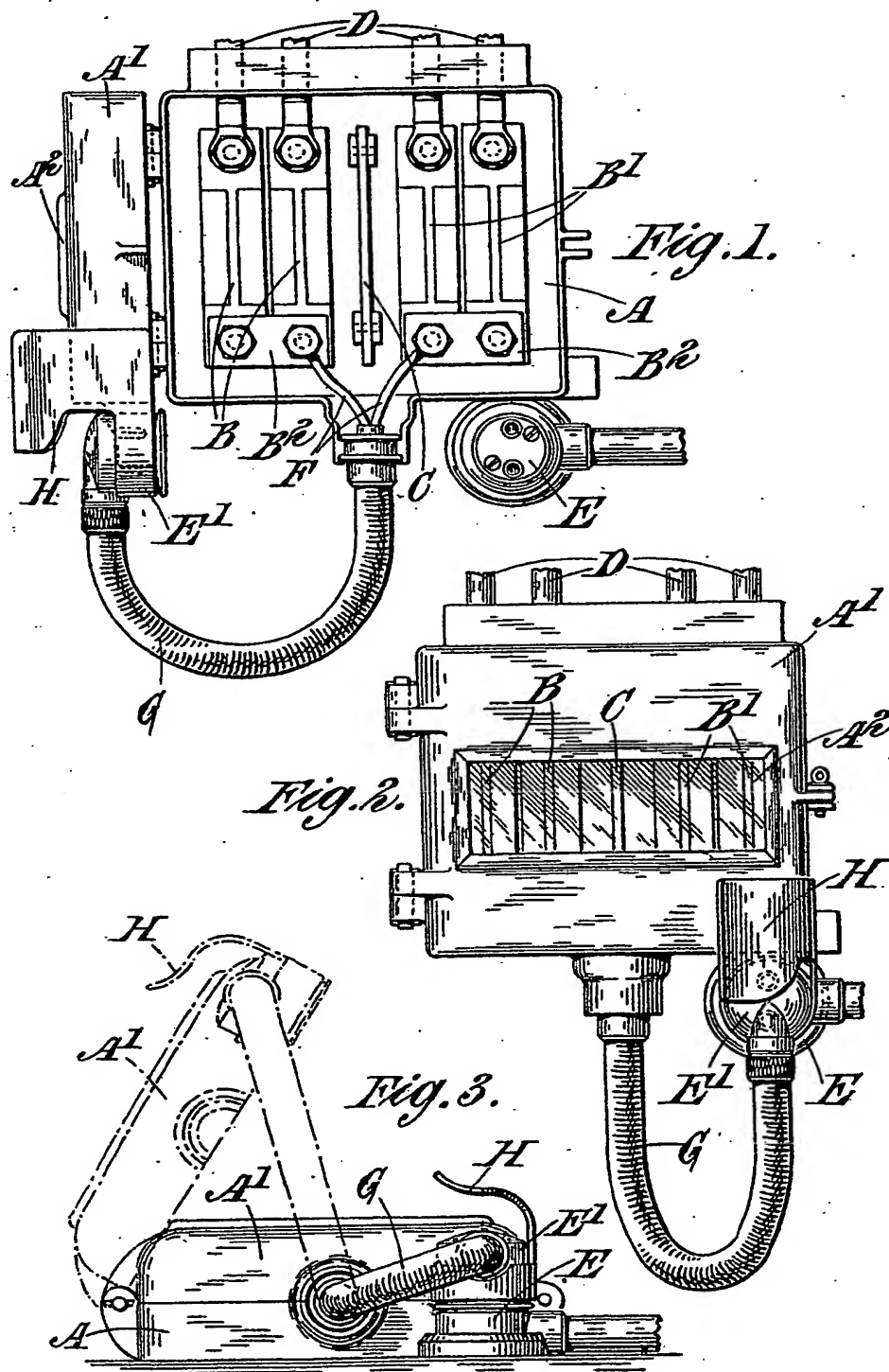
2. The improved electric house service or like fuse box and switch as described and illustrated with reference to the accompanying drawings.

Dated this 14th day of January, 1925.

KILBURN & STRODE.

Agents for the Applicants.

[This Drawing is a reproduction of the Original on a reduced scale.]



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